FIG.1
Background Art

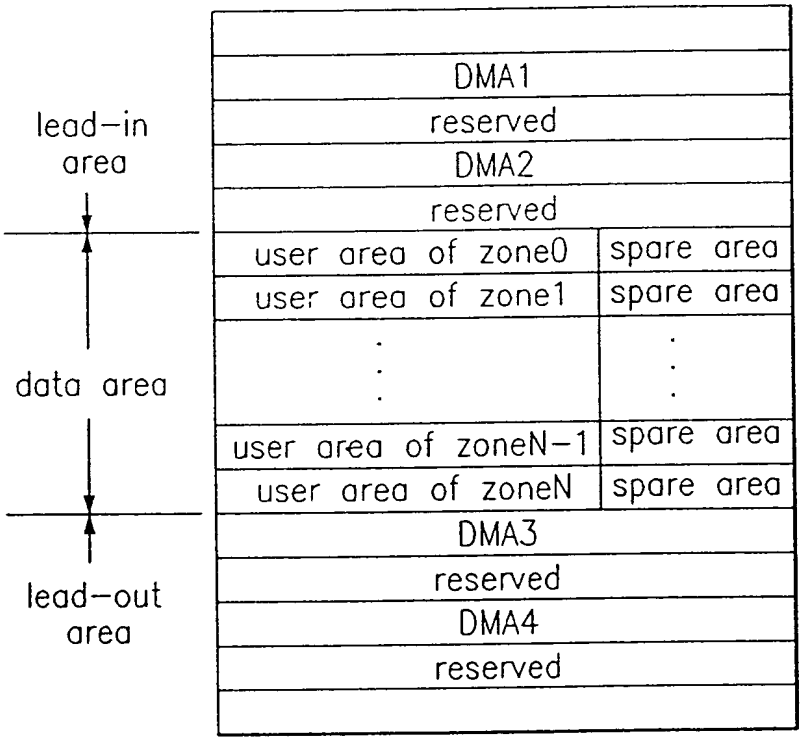


FIG.2A
Background Art

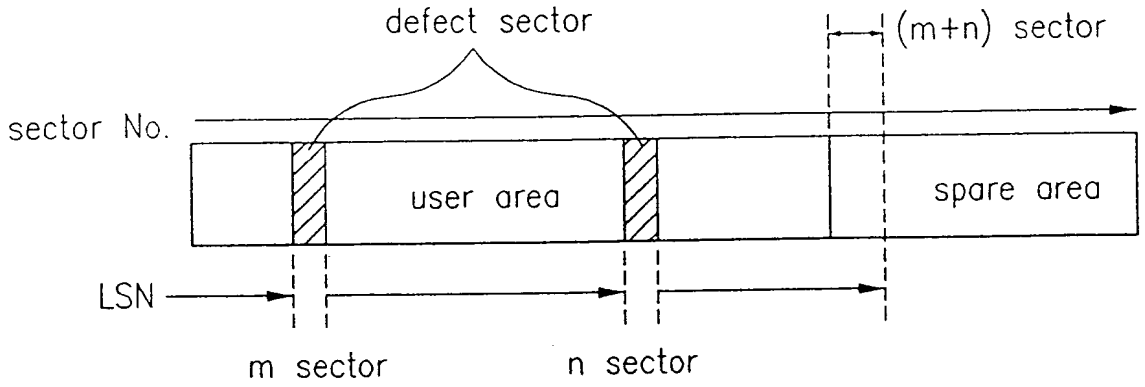


FIG.2B
Background Art

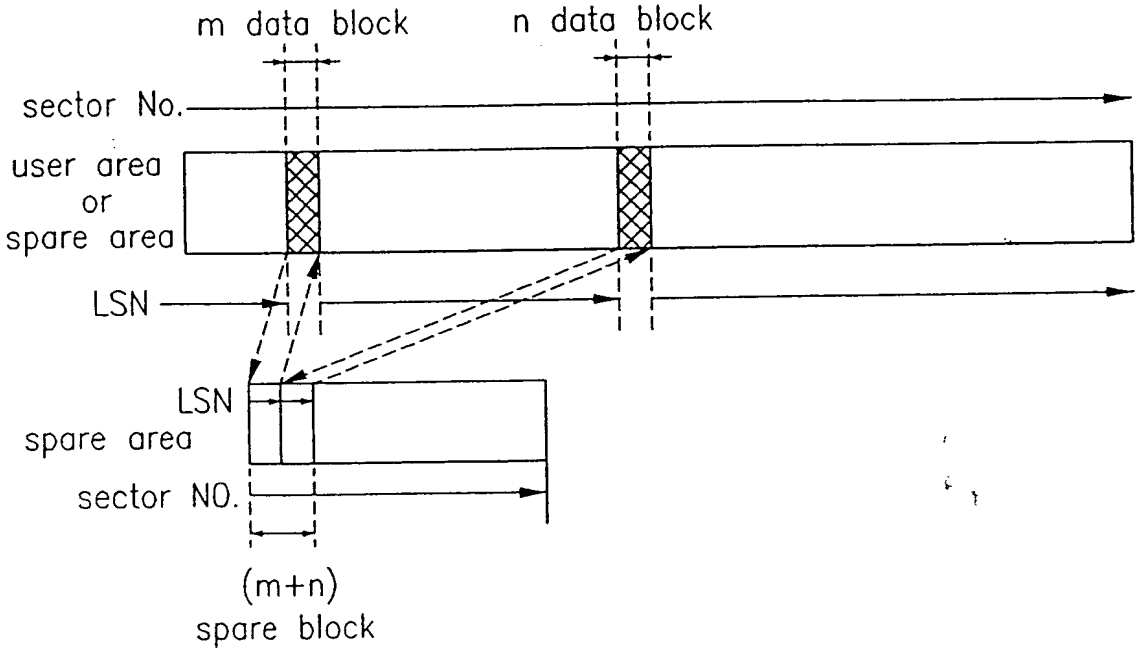
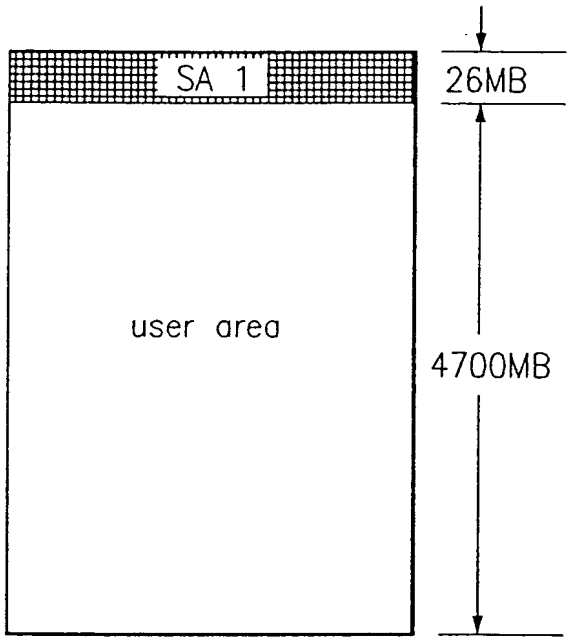


FIG.3
Background Art



Background Art

FIG. 4A

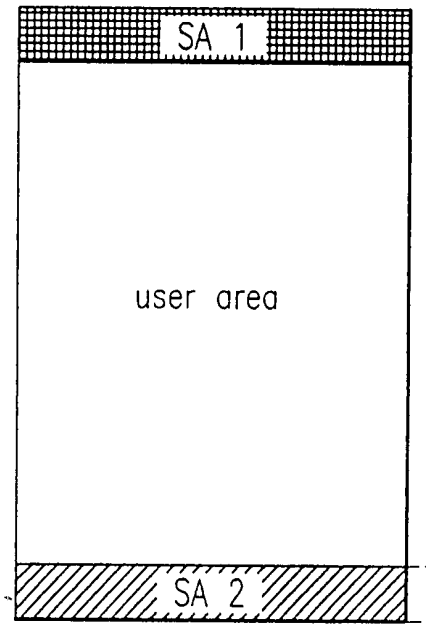


FIG. 4B

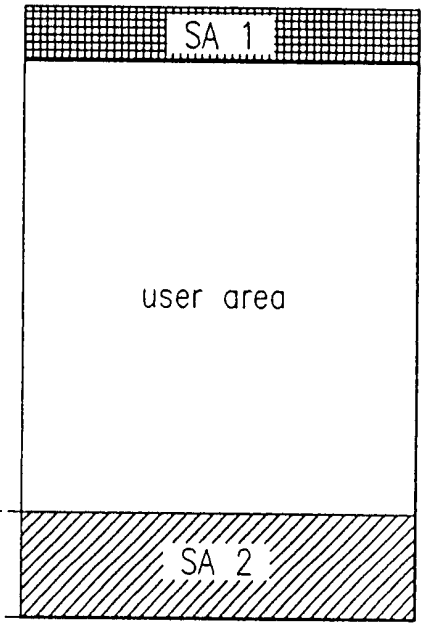
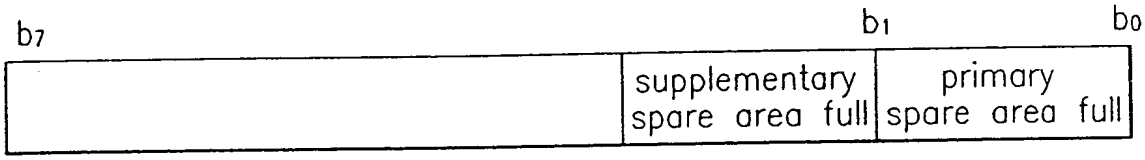


FIG.5



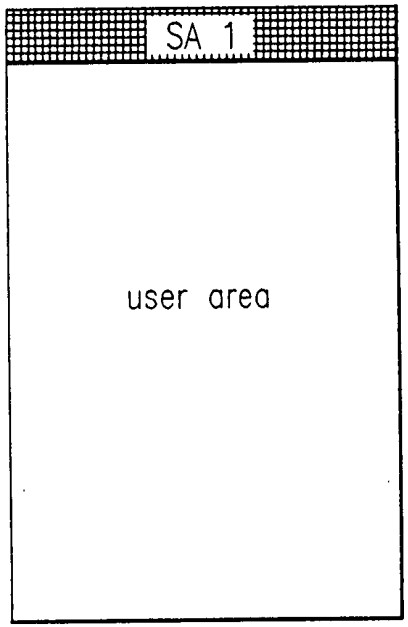
primary spare area full flag – 0b : spare block left in primary spare area

1b : spare block not left in primary spare area

supplementary spare area full flag – 0b : spare block left in supplementary spare area

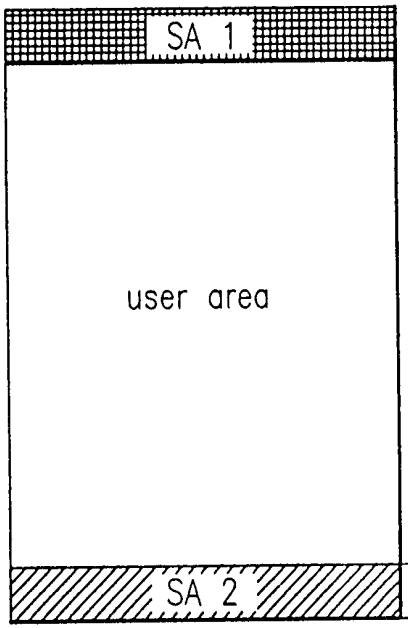
1b : spare block not left in supplementary spare area or supplementary spare area not assigned

FIG. 6A



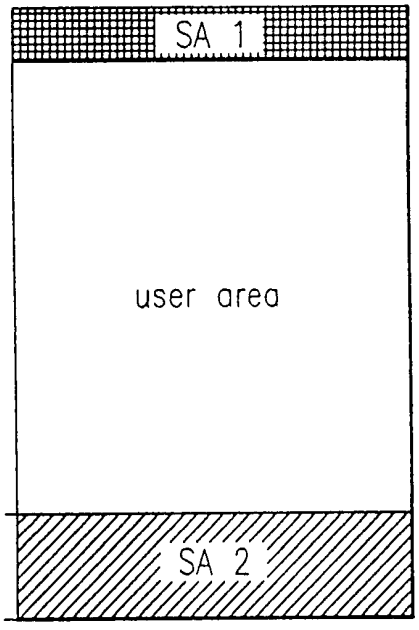
SA 1	0	1
SA 2	1	1

FIG. 6B



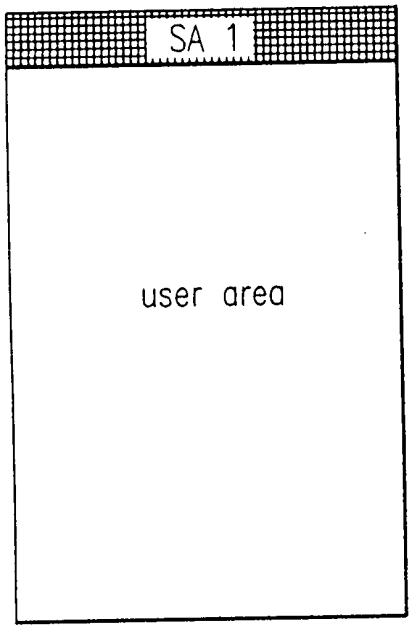
SA 1	0	1	1	1
SA 2	1	1	0	1

FIG. 6C



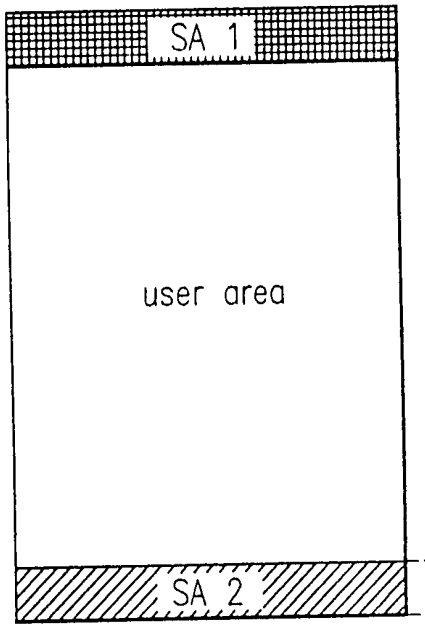
SA 1	0 1 1 1 1 1 ··· 1
SA 2	1 1 0 1 0 1 ··· 0 1

FIG. 7A



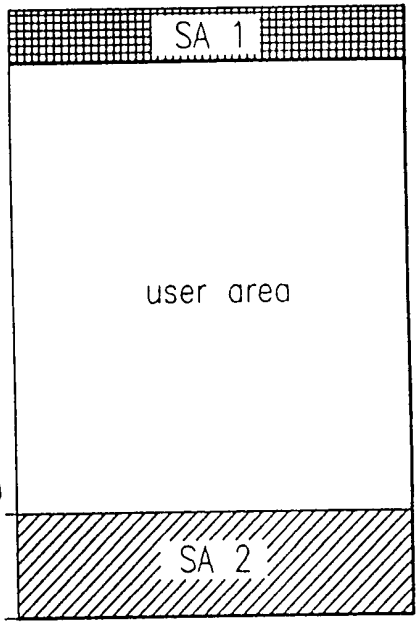
SA 1	0
SA 2	1

FIG. 7B



SA 1	0 0 1
SA 2	1 0 0

FIG. 7C



SA 1	0 0 1 ··· 1
SA 2	1 0 0 ··· 0 1

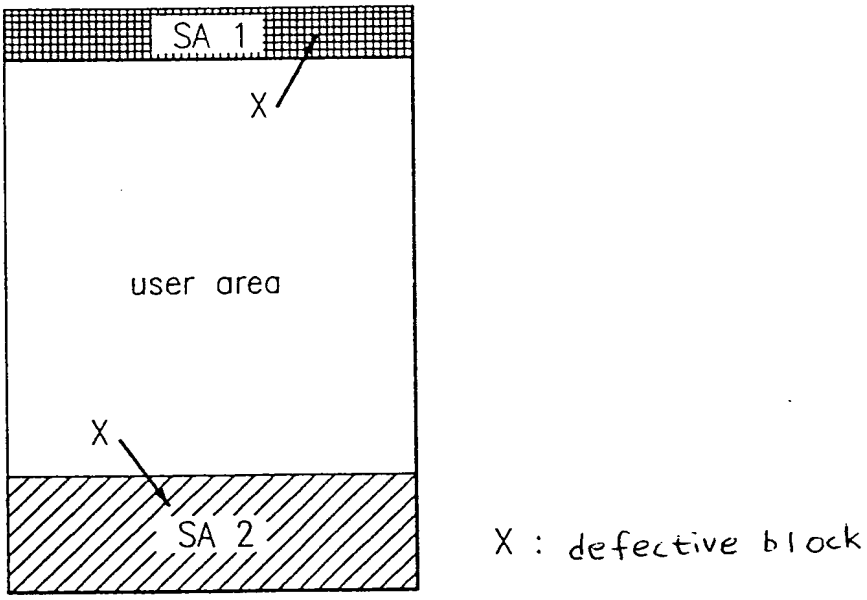



FIG.8